VSR CIVIL INFRA PVT. LTD.

VSR/BBMP/YNKD/W.No.03-006/2019-20 **Date. 07.02.2020**

CERTIFICATE

Division : Yelahanka

Sub Division : Yelahanka Satellite Town Sub Division

Ward No : 03

Ward Name : Attur

Job Code No: 003-20-000078

Name of Work : Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Contractor Name : M/S. Technical Manager (West), KRIDL , Bangalore.

Work Order No :BBMP/EE/YNK.D/W.O/ 195/2019-20

Running Account Bill : 1st and Part Bill

BR No :

Value Of Work Completed by the Contractor Amount : Rs.72,09,931.00

This is to certify that all the Items of Works have been carried out satisfactorily as per Specifications and Conform to MORTH.

for VSR Civil Infra Pvt. Ltd

VSR CIVIL INFRA PVT. LTD. BANGALORE

(Authorized Signatory)
Project Management Consultants

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-106

AE

#552/B, 6th Main Road, Hanumantanagar,Bengaluru – 560 019000. Cell : 9845230975
E-mail : vsrcivilinfra@gmail.com

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20 Date: 09.12.2019

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work : Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{10}

Compressive Strength as on : 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	02.12.2019	09.12.2019	8.105	192.5	8.56
2	02.12.2019	09.12.2019	8.121	198.6	8.83
3	02.12.2019	09.12.2019	8.135	202.3	8.99

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VSR CIVIL INFRA PVT. LTD. BANGALORE

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20 Date: 30.12.2019.

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work : Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{10}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	02.12.2019	30.12.2019	8.165	285.6	12.69
2	02.12.2019	30.12.2019	8.187	293.2	13.03
3	02.12.2019	30.12.2019	8.193	289.1	12.85

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VSR INFRA PVT. LTD. BANGALORE CIVIL

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20 Date: 09.12.2019

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work : Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{10}

Compressive Strength as on : 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	02.12.2019	09.12.2019	8.121	187.6	8.34
2	02.12.2019	09.12.2019	8.145	192.3	8.55
3	02.12.2019	09.12.2019	8.196	198.5	8.82

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VSR CIVIL INFRA PVT. LTD. BANGALORE

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20 Date: 10.12.2019

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work : Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{10}

Compressive Strength as on : 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	03.12.2019	10.12.2019	8.154	188.6	8.38
2	03.12.2019	10.12.2019	8.169	193.4	8.60
3	03.12.2019	10.12.2019	8.174	202.4	9.00

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VSR TECHNICAL INFRA PVT. LTD. BANGALORE

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20 Date: 10.12.2019

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work : Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{10}

Compressive Strength as on : 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	03.12.2019	10.12.2019	8.121	189.6	8.43
2	03.12.2019	10.12.2019	8.134	193.4	8.60
3	03.12.2019	10.12.2019	8.163	201.1	8.94

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VSR CIVIL INFRA PVT. LTD. BANGALORE

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 01.01.2020

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work : **Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division**

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	04.12.2019	01.01.2020	8.215	502.3	22.32
2	04.12.2019	01.01.2020	8.232	512.4	22.77
3	04.12.2019	01.01.2020	8.265	523.6	23.27

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VSR CIVIL INFRA PVT. LTD. BANGALORE

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 12.12.2019

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work : **Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division**

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 7th day

SLNo.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	05.12.2019	12.12.2019	8.187	352.6	15.67
2	05.12.2019	12.12.2019	8.163	368.4	16.37
3	05.12.2019	12.12.2019	8.192	348.0	15.47

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Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20 Date: 02.01.2020

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work : **Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division**

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	05.12.2019	02.01.2020	8.215	502.4	22.33
2	05.12.2019	02.01.2020	8.232	516.3	22.95
3	05.12.2019	02.01.2020	8.225	523.8	23.28

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VSR CIVIL INFRA PVT. LTD. BANGALORE

Job No: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 03.01.2020

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work : **Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division**

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	06.12.2019	03.01.2020	8.231	506.3	22.50
2	06.12.2019	03.01.2020	8.225	523.4	23.26
3	06.12.2019	03.01.2020	8.264	532.8	23.68

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VSR CIVIL INFRA PVT. LTD. BANGALORE

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20 Date: 07.01.2020

PRECAST SLAB 100mm Thick(CORE) TEST REPORT

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Contractor : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of Work : Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

No.of Sample Tested : 03

Date of Testing : 07.01.2020

Techinical Reference : IS:516-1959 (Reaffirmed 1999), SP-24:1983.

Grade of Concrete : M_{20}

Sl. No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m^3)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm^2)	Correction Factor for the Dia. (Strength of the Core x 1.08)	Corrected Cylinder Compressive Strength (N/mm^2)	Equivalent Cube Compressive Strength (N/mm^2)
1	50.00	78.00	0.358	2337.54	1.56	0.960	36.20	18.44	19.91	19.11	23.89
2	50.00	80.00	0.371	2361.86	1.60	0.960	35.40	18.03	19.47	18.69	23.37
3	50.00	83.00	0.388	2380.80	1.66	0.960	34.80	17.72	19.14	18.38	22.97

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VSR CIVIL INFRA PVT. LTD. BANGALORE

VSR/BBMP/KRIDL/W.No.03/2019-20

Date 29.11.2019

TEST REPORT ON FINE AGGREGATES (SAND)
IS 383-1970 (RA- 2002)

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West), KRIDL, Bengaluru**

Name of Work : Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division.

Date of Testing 29.11.2019

Material : Sand Total wt. of aggregates in gms = **1000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	48	4.80	4.80	95.2	90-100
2.36	132	13.20	18.00	82.0	75-100
1.18	141	14.10	32.10	67.9	55-90
600 Micron	162	16.20	48.30	51.7	35-59
300 Micron	251	25.10	73.40	26.6	8-30
150 Micron	189	18.90	92.30	7.7	0-10

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VSR CIVIL INFRA PVT. LTD. BANGALORE

CSC/BBMP/KRIDL/W.No.26/2019-20 Date 29.11.2019

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

: **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

: **M/s. Technical Manager (West), KRIDL, Bengaluru**

Name of Work : Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division.

Date of Testing 29.11.2019

Material : 40mm Aggregates

Total wt. of aggregates in gms = **15000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	422	2.81	2.81	97.19	95-100
20	5521	36.81	39.62	60.38	30-70
10	4251	28.34	67.96	32.04	10-35
4.75	4212	28.08	96.04	3.96	0-5

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VSR CIVIL INFRA PVT. LTD. BANGALORE

VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 29.11.2019

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Sent : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West), KRIDL, Bengaluru**

Name of Work : Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division.

Date of Testing 29.11.2019

Material : 20mm Aggregates

Total wt. of aggregates in gms = **5000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
40	0	0	0	100	100
20	128	2.6	2.6	97.4	95-100
10	2421	48.4	51.0	49.0	25-55
4.75	2232	44.6	95.6	4.4	0-10

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VSR CIVIL INFRA PVT. LTD. BANGALORE

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20 Date: 30.11.2019

TEST RESULTS OF PHYSICAL PROPERTIES OF REINFORCEMENT STEEL

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of Work : Asphalting to roads at Ambhabhavani layout and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Sample Identification : 8mm,10mm,12mm Fe 500 TMT Bars

Technical Reference : IS 1786:2008, IS 1608:2005, IS 1599:1985 (Reaffirmed 2006)

Date of test : 17.12.2019

S.No	Brand	Nominal size (dia in mm)	Mass per metre (kg/metre)	TENSILE STRENGTH		
				0.20 % proof stress/ yield stress ($N/mm^{2)}$	Tensile strength ($N/mm^{2)}$	Elongation, percent on gauge length
1	Fe 500	8	0.33	534	543	14
2	Fe 500	10	0.65	547	558	14.5
3	Fe 500	12	0.84	562	572	15

Remarks:

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